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## Energy from Waste as Part of Lake County's Long Term Solid Waste Management Solution

Lake County Solid Waste Alternatives Task Force  
April 25, 2011



## Our Discussion today

- **Covanta Recommendation and Rationale**
- **The Case for Energy from Waste**
- **The Case against Landfills**
- **Looking Past June 2014**





## Covanta Recommendation

Renew your commitment to an integrated solid waste management approach through continued use of the Lake County Energy from Waste Facility.



## Recommendation Reasoning

- Anchors Lake County's integrated waste management system.
- Disposes of waste in a clean, reliable and renewable manner.
- Creates important economic development opportunities.
- Complements recycling and recovers metals and energy.
- Reduces long-haul trucking of waste to out-of-county landfills.
- Doesn't shift burden to distant communities or future generations.
- *Covanta will work through the economics with Lake County to ensure a mutually beneficial financial arrangement.*



# The Facility: By the Numbers



## 528 TPD EfW Facility

- Two 264 TPD Martin® combustion units
- Opened: January 1992
- Nameplate generation capacity: 14.5 MW (enough for ~ 11,000 homes / businesses)
- Total tons MSW processed: >3 million
- More than **750,000 tons of coal** NOT USED (equal to 15,000 railroad cars)
- More than **180 acres** of landfill space preserved





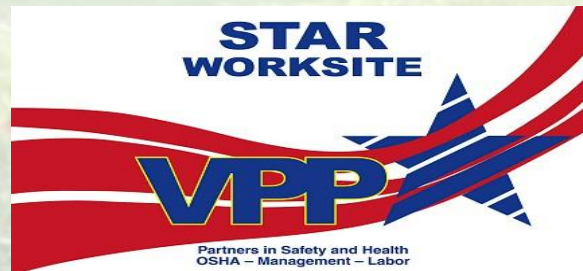
## The Facility: In perspective

- Built to protect Lake County's environment and to enhance and integrate existing solid waste management resources.
- Allows you maximum flexibility in all market conditions
- Helps Lake County maintain full control of the economic impact of providing fully integrated solid waste management services
- Working together, Covanta and Lake County have made great strides to reduce Lake County's cost of solid waste management service



## The Facility: Award Winning/State of the Art Facility

- 2005 & 2006 Best Places to Work Lake & Sumter counties / 2007 Exceptional Employer
- 2007 OSHA VPP Flag Raising & Open House
- 2008 EPA Award & Clean Tech Celebration
- 2008 William C. Schwarz Innovation Award, Mid-Florida Economic Development Commission





## EfW: Energy Benefits

### Generates clean energy from local renewable fuel source

- US EPA states EfW “produces electricity with less environmental impact than almost any other source.”
- Baseload power – 24/7/365
- Homegrown power generated in Lake County helps balance load on Central Florida’s transmission grid.

### Promotes energy security

- One ton of waste produces 500 -750 kWhrs
- Avoids burning coal and other fossil fuels







## EfW: Economic Benefits

- **Stable, high-wage jobs**
  - In addition to 36 primary jobs, an estimated 45 secondary jobs
  - Average tenure of Lake facility employees: 11.1 years
  - Total annual expenditures, (payroll, purchases, etc): \$11-12 million / year (more than half expended locally)
  - Annual economic impact: More than \$15 million / year added to Lake County economy
- **Preservation of landfill space / extension of landfill life**
  - Approximately 180 acres preserved since 1992
  - Life of Astatula landfill extended to ??
- **Direct benefit to Lake County tax rolls**
  - Estimated \$500,000 / year (beginning in 2014)
- **EfW offers predictable waste disposal costs**



# The Case against Landfilling

## Environmental Risks

- Greenhouse gas emissions: methane ( $\text{CH}_4$ ) is more than 20 times more effective than carbon dioxide ( $\text{CO}_2$ ) in trapping heat in the atmosphere).
- EPA states landfills – even those with gas collection systems – are major sources of methane emissions to atmosphere.
- Trucking waste to a landfill is another source of greenhouse gasses.







# The Case against Landfilling

## Economic Risks

- Landfills expose communities to uncertain costs.
- Fuel costs for trucking.
- Gate fees are low now, but could rise if fuel prices spike.
- Sending waste to out-of-county regional landfills transfers burden of managing decomposing waste to another jurisdiction and future generations.







## Public Views: EfW v. Landfill

Will you please tell me if you have a favorable or unfavorable opinion of each energy source? If you have no opinion or have never heard of energy source, just say so.

### Favorable Ranking

	FAV	very	some	UNFAV	some	very	No Op	NHO	NET
Solar Energy	87	67	20	5	3	2	7	1	+82
Natural Gas	79	44	35	13	8	5	8	1	+66
Wind Energy	78	53	25	10	5	5	9	4	+68
Waste to Energy	67	38	30	7	4	3	13	13	+60
Renewable Energy	65	43	22	4	2	2	15	16	+61
Nuclear Energy	62	33	29	22	11	10	14	2	+40
Oil	54	23	31	36	18	18	9	1	+18
Landfill Gas	48	21	27	16	7	9	23	14	+32
Coal	48	20	28	41	19	21	10	1	+7
Fossil Fuels	47	21	26	25	14	10	20	9	+22
Biomass Energy	31	16	15	8	4	4	24	37	+23

Florida TaxWatch, a statewide nonpartisan, nonprofit research institute, commissioned a survey that shows that there is an overwhelming majority of Floridians that want the Legislature to pass a bill that will increase renewable energy production in the State.

McLaughlin & Associates partnered with Anzalone Liszt Research to develop and conduct a bipartisan survey on November 3-4, 2010. The accuracy of the sample of 800 likely general election voters, who pay their electric bill, is within +/- 3.4% at a 95% confidence interval.



## Bottom Line

- EFW is key to Lake County's integrated solid waste system and is the most environmentally responsible way for Lake County to proceed moving forward.
- Sending Lake County's solid waste to a landfill would transfer the ultimate costs and environmental responsibility to another jurisdiction and future generations.
- Covanta desires to continue operating the Lake County EfW facility and will work through the economics to ensure a mutually beneficial and respectful relationship with the County.



## The Facility: Post June 2014

- Covanta and Lake County have made great strides to reduce Lake County's cost of solid waste management service and we should continue to do so.
- Covanta is prepared to start negotiating with the County now to shape a post June 2014 Service Agreement that reflects what we believe to be the Taskforce's long term goals - maximizing recycling, minimizing rate payer impact and eliminating the need for a "put or pay" delivery requirement.
- Based on current market trends we believe we can keep the cost of service affordable for the citizens of Lake County and the communities that surround it.





## The Facility: Post June 2014

- There are many variables we are prepared to discuss:
  - Contract Term
  - County Participation Level
  - Participation of the Cities
  - Revenue Sharing
  - Residue Disposal
  - Landfill Operations
  - Leachate Disposal
- Working together we can help Lake County control the economic impact of providing fully integrated solid waste management services



# It's Not Waste



# It's Energy

